- 196. Once band reconfiguration commences in a given NPSPAC Region, the Transition Administrator will serve primarily an oversight function as necessary to implement band reconfiguration. For example the Transition Administrator will:
 - Monitor the retuning schedule and resolve any schedule delays or refer same to the Public Safety and Critical Infrastructure Division for resolution.
 - Coordinate with adjoining NPSPAC Regions to ensure that interference is not being caused to their existing facilities from relocated stations.
 - Provide quarterly progress reports to the Commission in such detail as the Commission
 may require and include, with such reports, certifications by Nextel and the relevant
 licensees that relocation has been completed and that both parties agree on the amount
 received from the Letter of Credit proceeds in connection with relocation of the licensees'
 facilities. The report shall include description of any disputes that have arisen and the
 manner in which they were resolved. These quarterly reports need not be audited.
 - Provide to the Public Safety and Critical Infrastructure Division, on each anniversary of the effective date of this Report and Order, an audited statement of relocation funds expended to date, including salaries and expenses of Transition Administrator.⁵¹⁵
 - Facilitate resolution of disputes by mediation; or referral of the parties to alternative dispute resolution services.
- 197. The Transition Administrator may not serve as the repository of funds used in band reconfiguration, excepting such sums as Nextel may pay for the Transition Administrator's services. Moreover, the Transition Administrator will not be certified by the Commission as a frequency coordinator.
 - 198. We envision the relocation process in a particular region unfolding as follows:
 - 1) Nextel shuts down its General Category channels and relocates all non-Nextel General Category licensees. 516 It temporarily shifts many of its operations to "green space" at 900 MHz.
 - 2) NPSPAC licensees relocate to six megahertz of spectrum in the former General Category space at Nextel's expense.
 - 3) Nextel relocates its systems from the green space and from the interleaved portion of the band into the vacated NPSPAC channels; surrendering its rights to spectrum below 817 MHz/862 MHz spectrum in the process.
 - 4) Any remaining relocations necessary to effect complete reconfiguration of the band in that region are made at Nextel's expense, e.g. moving public safety systems out of the Expansion Band. 517

⁵¹⁵ An audited statement is one that comports to the relevant Financial Accounting Standards Board (FASB) standards.

⁵¹⁶ In this connection, we observe that during band reconfiguration the provisions of Section 90.157 will not apply to Nextel and non-Nextel stations that have been shut down in order to accommodate our rebanding plan. See 47 C.F.R. § 90.157.

⁵¹⁷ In this regard, we will allow inter-category sharing for the limited purpose of this proceeding. See 47 C.F.R. § 90.677 in Appendix C, infra.

We envision system relocation involving the following steps:

- 1) The Transition Administrator notifies a licensee that its system needs to be relocated in order to complete band reconfiguration. The Transition Administrator will specify a replacement channel for each channel in the licensee's system that needs to be changed to a new channel.
- 2) The licensee obtains an estimate of the cost to reconfigure its system and provides that estimate to the Transition Administrator. The submission to the Transition Administrator shall contain the licensee's certification that the funds requested are the minimum necessary to provide facilities comparable to those presently in use.
- 3) The Transition Administrator will review the estimate—including an analysis to ensure that the estimate does not exceed the cost of providing comparable facilities. If the review indicates the need for additional support, or is otherwise deficient, the licensee will be so informed and will be required to furnish a revised estimate.
- 4) The Transition Administrator will submit the estimate to Nextel, which will have the opportunity to review the details of the estimate and, if appropriate, dispute the estimate.
- 5) The Transition Administrator will facilitate resolution of any such disputes, acting as an intermediary between the licensee and Nextel. We envision that all licensees will exercise good faith and we strongly encourage licensees to cooperate in resolving disputes so as not to unreasonably frustrate band realignment.⁵¹⁸
- 6) Once Nextel's concurrence, which shall not unreasonably be withheld, has been obtained, the Transition Administrator will issue a Draw Certificate to the Letter of Credit Trustee who will draw down funds as appropriate from the letter of credit and disburse them, in accordance with the Transition Administrator's instructions, to the entity(ies) contracted to reconfigure the system (for example, the licensee, a local contractor and an equipment manufacturer—Nextel personnel will not be involved in reconfiguring a licensee's system.⁵¹⁹)
- 7) At the conclusion of system configuration the Transition Administrator will audit the amount expended and either issue a second Draw Certificate to the Letter of Credit Trustee to cover any reasonable expenditures reasonably agreed to by Nextel and the licensee that were not covered by the first Draw Certificate or direct the Letter of Credit Trustee to obtain reimbursement for any excess funds (with any disputes as to final amounts to be resolved following the dispute resolution procedures set forth in ¶ 194.
- 8) The licensee begins operating on the new channel(s).
- 199. We expect that the Transition Administrator, the Trustee appointed to administer the Letter of Credit, and Nextel will formalize the matters set forth herein in a contract, a draft of which shall be submitted to the Commission for review and approval prior to execution. Attached hereto as Appendix E Annex D is a non-exhaustive outline of provisions that the Commission would expect to be contained in such a contract.
- 200. In sum, we believe that reliance on the expertise of our existing frequency coordinators, together with our use of the services of an independent Transition Administrator is preferable to the

⁵¹⁸ Licensees that fail to act in good faith or unreasonably decline to cooperate may be subject to enforcement action.

The Trustee will disburse funds in accordance with the Transition Administrator's instructions which may include directions to pay contractors in a lump sum or over time in accordance with milestone payments set forth in the contractor's contract with the licensee.

Consensus Parties' proposed RCC and multiple committees.⁵²⁰ Moreover, given the detailed guidelines under which the coordinators and Transition Administrator will operate, coupled with the procedures for ongoing Commission review described *infra*, we conclude that Commission use of such expertise and services is well within our authority.⁵²¹

b. Scheduling and Implementation

- 201. In assigning oversight of the logistics of band reconfiguration to a Transition Administrator, we allow all parties involved in the relocation process a degree of flexibility that would not be achievable if we set rigid rules for the relocation process. However, we do impose the following obligations on the parties:
 - All parties, including Nextel, are held to a high standard of utmost good faith in their transactions with Nextel, or its designee, the Transition Administrator, other licensees, and the Commission. In particular, and without limiting the generality of the foregoing obligation, representations made to the Transition Administrator will be held to the same standard of truth and candor as representations made to the Commission.
 - Within thirty days of the Commission approval of the Transition Administrator, the Transition Administrator will provide the Commission with a schedule detailing when band reconfiguration shall commence for each NPSPAC Region. The plan should also detail—by NPSPAC Region—which relocation option each non-Nextel ESMR licensees has chosen. The Chief of the Public Safety and Critical Infrastructure Division of the Wireless Telecommunications Bureau is hereby delegated the authority to finalize and approve such a plan. The schedule shall provide for completion of band reconfiguration in no more than thirty-six months following the release of a Public Notice announcing the start date of reconfiguration in the first NPSPAC region. In addition, as an interim benchmark, the schedule must provide for retuning of Channels 1-120 in twenty NPSPAC Regions within eighteen months. Relocation will commence according to the schedule set by the Transition Administrator but all systems must have commenced reconfiguration within thirty months of the release of a Public Notice announcing the start date of reconfiguration in the first

⁵²⁰ In this connection, we strongly encourage frequency coordinators to complete any necessary review within thirty days.

Welfare had authority to tie AFDC benefits to state unemployment compensation determinations since in doing so the Secretary "incorporated a well-known and widely applied standard.") and R. H. Johnson & Co. v. SEC, 198 F.2d 690, 695 (2nd Cir. 1952), cert. denied 344 U.S. 855, 73 S.Ct. 94, 97 L.Ed. 664 (1952) (SEC did not unconstitutionally delegate powers to National Association of Securities Dealers because it retained power to approve or disapprove rules and to review disciplinary actions). Compare United Black Fund, Inc. v. Hampton, 352 F.Supp. 898, 904 (D.D.C. 1972) (Civil Service Commission Chairman may permit private entities preliminarily to determine eligibility of local health and welfare agencies for participation in the Combined Federal Campaign where Chairman set standards local agencies must meet, and where the Chairman retained final review authority) with National Park and Conservation Ass'n v. Stanton, 54 F. Supp.2d 7, 20 (D.D.C.1999) (National Park Service's ("NPS") delegation of management of national scenic river to a private council constitutes unlawful delegation because "NPS retains no oversight over the [c]ouncil, no final reviewing authority over the council's actions or inaction, and the [c]ouncil's dominant private local interests are likely to conflict with the national environmental interests that NPS is statutorily mandated to represent."); cf. USTA v. FCC (DC Cir. Mar. 2, 2004) (holding that the Commission had impermissibly subdelegated its authority to the states.)

⁵²² See ¶ 162 supra.

NPSPAC region.

- The schedule shall specify a start date for the reconfiguration of each Region. Thirty days before the start date, the Commission will issue a Public Notice initiating a three-month voluntary negotiation period between Nextel and all relocating incumbents. Nextel and relocating incumbents may agree to conduct face-to-face negotiations or either party may elect to communicate with the other party through the Transition Administrator. The Chief of the Public Safety and Critical Infrastructure Division of the Wireless Telecommunications Bureau is hereby delegated the authority to issue such Public Notices. The release of a Public Notice announcing the start date of reconfiguration in the first NPSPAC region starts the thirty-six month band reconfiguration period.
- If voluntary negotiations do not yield an agreement by the date specified in the Commission Public Notice, the parties are required to enter not three-month mandatory negotiation period and shall have obligations patterned after those specified in our *Upper 200 SMR* and *Microwave Cost-Sharing* proceedings. S23 Again, the parties may agree to conduct face-to-face negotiations or elect to communicate through the Transition Administrator. The Transition Administrator may schedule mandatory settlement negotiations and mediation sessions and the parties must conform to such schedules.
- If, after the three-month mandatory negotiation period, the parties have not reached an agreement, disputed issues shall be identified in writing by both parties, and the matter referred to the Transition Administrator who shall mediate an agreement, or refer the parties to mediation. If disputed issues remain thirty days after the end of the mandatory negotiation period, the Transition Administrator shall forward the record to the Chief of the Public Safety and Critical Infrastructure Division, together with advice on how the matter(s) may be resolved. The Chief of the Public Safety and Critical Infrastructure Division is hereby delegated the authority to rule on disputed issues, de novo. Any party wishing to appeal the decision of the Chief of the Public Safety and Critical Infrastructure Division may avail themselves of an evidentiary hearing as discussed in ¶ 194 supra.
- In the alternative, parties who are unable for technical reasons or otherwise to relocate according to the schedule may petition the Commission for a waiver of the relocation obligation. Such a waiver would only be granted on a strict non-interference basis. Moreover, there would be a high burden to surmount for any party seeking a waiver of this obligation.
- All parties are charged with the obligation of utmost good faith in the negotiation process.⁵²⁴
 If any licensee fails to negotiate in good faith, its facilities may be involuntarily relocated

⁵²³ See 47 C.F.R. § 90.699(b)(2). See also Comments of NAM/MRFAC to Supplemental Comments of Consensus Parties at 11-12; Cinergy Corp., Consumers Energy Corp., Entergy Corp., Entergy Services March 12, 2003 Ex Parte.

Among the factors relevant to a good-faith determination are: (1) whether the party responsible for paying the cost of band reconfiguration has made a bona fide offer to relocate the incumbent to comparable facilities; (2) the steps the parties have taken to determine the actual cost of relocation to comparable facilities; and (3) whether either party has unreasonably withheld information, essential to the accurate estimation of relocation costs and procedures, requested by the other party. See Amendment to the Commission's Rules Regarding a Plan for Sharing the Costs of Microwave Relocation, First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 8825, 8837-8838 ¶ 21.

and its license modified accordingly by the Commission. We hereby delegate to the Wireless Telecommunications Bureau the authority, pursuant to Section 316 of the Act, ⁵²⁵ to modify licenses under such circumstances.

- All relocating licensees shall be relocated to comparable facilities. Comparable facilities are those that will provide the same level of service as the incumbent's existing facilities, with transition to the new facilities as transparent as possible to the end user. 526 Specifically, (1) equivalent channel capacity; 527 (2) equivalent signaling capability, 528 band rate and access time; (3) coextensive geographic coverage; 529 and (4) operating costs. 530 If the reconfiguration of a licensee will entail a significant interruption of service during the relocation process, Nextel will fund the installation of a redundant system. 531
- Absent agreement between parties, the Transition Administrator will be responsible for determining the information that relocating incumbents must supply in support of a relocation agreement.

202. In setting the above framework for implementing band reconfiguration, we have considered but rejected some of the Consensus Parties' detailed proposals, e.g. a rule incorporating the lengthy list of equipment that incumbents would be required to submit to Nextel within a time certain.⁵³² We have done so with the knowledge that relocation of some systems will not require information to that degree of detail, and that some degree of flexibility will better serve the parties. The overriding requirement of our framework is the good faith requirement. While parties must first bring disputes over the utmost good faith requirement to the Transition Administrator, disputing parties may subsequently bring breaches of the good faith requirement to the Commission and similarly bring there, any instance in which a party frivolously or without substantiation, charges another party with failure to negotiate in good faith.⁵³³ As the Commission has noted previously there is no "one size fits all" rule that can be applied to

^{525 47} U.S.C. § 316.

⁵²⁶ See generally, Amendment of Part 90 of the Commission's Rules to Facilitate Future Development of SMR Systems in the 800 MHz Frequency Band, Second Report and Order, 12 FCC Rcd 19079, 19112-19113 ¶ 89-95 (1997) (Upper 200 SMR Second Report and Order).

Our rules define channel capacity as the same number of channels with the same bandwidth that is currently available to the end user. See Upper 200 SMR Second Report and Order, 12 FCC Rcd 19079, 19112-13 ¶ 92. See also 47 C.F.R. § 90.699(d)(2). For example, if an incumbent's system consists of five 25 kHz channels, the replacement system must also have five 25 kHz channels. Our rules do not, however, mandate identical channel configuration. See Upper 200 SMR Second Report and Order, 12 FCC Rcd 19079, 19112-13 ¶ 92.

⁵²⁸ See Upper 200 SMR Second Report and Order, 12 FCC Rcd 19079, 19112-13 ¶ 92. See also 47 C.F.R. § 90.699(d)(2).

⁵²⁹ Id.

⁵³⁰ See Upper 200 SMR Second Report and Order, 12 FCC Rcd 19079, 19113 ¶ 94. See also 47 C.F.R. § 90.699(d)(4). These costs will be estimated and paid as part of the relocation costs...

⁵³¹ In this regard we observe that our definition of comparable facilities is limited to already existing facilities.

⁵³² See Supplemental Comments of the Consensus Parties at 15-19 and Appendix C.

⁵³³ See, e.g., 47 U.S.C. §§ 312, 503.

the good faith issue, which is largely fact-dependent and likely to vary from case-to-case. 534

203. We also have heeded the concern of some commenting parties that information relative to band reconfiguration could be sensitive from a security standpoint. We encourage, but do not require, the parties and the Transition Administrator to exercise discretion in disclosing any security-sensitive information; but note that there is a balance between the public's need to know and the need to withhold sensitive information. Thus, for example, the Commission has struck the balance in favor of public disclosure in making its Universal Licensing System (ULS) data available on the Internet. A large amount of information on existing 800 MHz facilities is contained in the ULS and the ULS also will contain information on the license modifications necessary to implement band reconfiguration. Similarly, we are not persuaded by the argument that furnishing information necessary for band reconfiguration would somehow result in a competitor gaining access to information it could use to its advantage. We do not foresee any party having access to competitively-sensitive information such as the identity and other details of an incumbent's customers.

Freeze on the Acceptance of 800 MHz Applications

204. The Consensus Parties requested that we freeze the acceptance of applications for 800 MHz public safety, non-cellular SMR and Business and Industrial/Land Transportation authorizations pending band reconfiguration.⁵³⁶ We strongly agree with the parties who point out the adverse effects such a three-year freeze could have on their companies' business plans. 537 Nonetheless, we see no alternative to a freeze if band reconfiguration is to be timely accomplished. There is a middle ground, given the incremental implementation of band reconfiguration Region by Region. Therefore we will freeze 800 MHz applications for a region when we issue the *Public Notice* announcing the date when voluntary negotiation of relocation agreements must be concluded. This freeze will last until thirty working days after the completion of mandatory negotiations for a given Region.⁵³⁸ However, such a freeze would not include the modification applications filed in order to implement band reconfiguration. Moreover, we will do everything possible to minimize the effect the incremental freezes may have on incumbent licensees and new applicants, and direct the Transition Administrator to make accommodations in the implementation plan that will avoid such adverse effects. Moreover, we will not freeze the acceptance of modification applications that do not change the frequency or expand the coverage area of existing systems. Finally, we remind potentially affected parties of the availability of the Commission's waiver process and Special Temporary Authorizations when needed in order to avoid prejudice to any applicant during the band reconfiguration process.

⁵³⁴ See, e.g., Upper 200 SMR Second Report and Order, 12 FCC Rcd 19079; Petition For Declaratory Ruling Concerning The Requirement For Good Faith Negotiations Among Economic Area Licensees And Incumbent Licensees In The Upper 200 Channels Of The 800 MHz Band, Memorandum Opinion and Order, 16 FCC Rcd 4882 (2001) (Good Faith MO&O).

⁵³⁵ See Supplemental Comments of the Consensus Parties at Appendix C, C-4-5.

⁵³⁶ See Supplemental Comments of Consensus Parties at 26.

⁵³⁷ See, e.g., Letter, dated November 13, 2003, from R. David Laurrell, County Administrator, County of Campbell, Virginia Board of Supervisors to Marlene H. Dortch, Secretary, Federal Communications Commission; Comments of American Electric Power Company, Inc. to Supplemental Comments of the Consensus Parties at 9-10.

⁵³⁸ The mandatory negotiation period essentially ends six months after voluntary negotiations begin.

d. Tolling of 800 MHz Site-Based Construction Requirements

205. Since the 800 MHz band reconfiguration process will take place incrementally in fifty-one geographic regions, some site-based incumbent 800 MHz licensees may face construction deadlines prior to their being scheduled for relocation. To resolve this issue we will allow licensees which are ready to construct and waiting only for assignment of their new channel to submit a waiver request demonstrating that they have commenced construction, e.g. have on hand, or have placed a firm order for, non frequency-sensitive equipment, have erected a tower, obtained a commitment for tower space, etc.

206. If the Transition Administrator has specified said licensee a new channel and the licensee can immediately use the channel without causing interference to other systems, it must construct within its currently applicable deadline. Otherwise, the licensee may submit a waiver request for extension of the construction period until: (a) six months after the Transition Administrator has specified it a channel, if that channel can be used, in advance of band reconfiguration in the region, without causing interference; or (b) if its channel cannot be activated without interference to other systems, six months after the completion of band reconfiguration in its NPSPAC region. The Commission's waiver rules⁵⁴⁰ will apply and the waiver requests will be evaluated on a good cause basis e.g. on a showing by the licensee that it would have constructed but for the fact that band reconfiguration would affect its proposed facilities. Licensees whose construction deadline passed before the release of this Report and Order, and which do not have an extension of time request already pending, will have a particularly high evidentiary standard to meet when they submit a waiver request. These provisions also apply to EA licensees facing construction deadlines pursuant to Section 90.685 of the Commission's Rules.⁵⁴¹

6. Disposition of Nextel's 900 MHz SMR and 700 MHz Guard Band Block B Spectrum

207. The Consensus Plan contemplated that, at the end of band reconfiguration, Nextel would relinquish its rights to 900 MHz SMR spectrum as an incentive for non-cellular SMR and B/ILT licensees to vacate 800 MHz band channels on a "two for one" basis, i.e. each 800 MHz licensee that relocated to 900 MHz spectrum would get rights to twice the spectrum it occupied in the 800 MHz band. We are not persuaded that Nextel's abandoning service to the public in the 900 MHz band in order to provide non-cellular SMR and B/ILT licensees with 900 MHz spectrum for which there is no demonstrated need is in the public interest. We are further dissuaded from accepting Nextel's proffer of relinquishment of its 900 MHz spectrum rights because Nextel likely will need to use this spectrum to accommodate subscriber demand during 800 MHz band reconfiguration; and, possibly thereafter. Even if the 900 MHz spectrum went to public safety, there are no "rebanding" benefits to using this spectrum for public safety because it

⁵³⁹ For example, this may include licensees with extended implementation authority, new licensees, or licensees with pending requests for extension of current authorization.

⁵⁴⁰ See 47 C.F.R. § 1.925.

⁵⁴¹ See 47 C.F.R. § 90.685(b).

⁵⁴² See Supplemental Comments of the Consensus Parties at 13.

Nextel's need for the 900 MHz spectrum may arise if there are two 800 MHz ESMR licensees in a market, e.g. Nextel and Southern LINC, and both cannot be accommodated in the 817-824 MHz / 862-869 MHz cellular-architecture spectrum segment. In that instance, Nextel must surrender the additional spectrum necessary to accommodate the non-Nextel cellular-architecture system. The 800 MHz spectrum that Nextel loses in such a case may be compensated for by Nextel shifting some of its operations to its 900 MHz SMR frequencies. See ¶ 159 supra.

is isolated from the consolidated block of 800 and 700 MHz spectrum that will be available for public safety after rebanding. In this regard, 900 MHz can be distinguished from the 700 MHz Guard Band spectrum, which could be added to the consolidated block if we decided to make the 700 MHz Guard band spectrum available for public safety use. From an interference perspective, our decision to permit operational flexibility (i.e. cellular architecture) in the 900 MHz band effectively precludes use of 900 MHz by public safety at this time. While public safety would benefit from B/ILT and SMR licensees relocating to 900 MHz as it would provide "green-space" in the 800 MHz band, to the extent Nextel wants to offer 900 MHz spectrum to B/ILT on a 2-for-1 basis, as it has proposed, it can do so through private transactions without returning this spectrum to the Commission.

- 208. As noted at paragraph 61 supra, Nextel also has proposed to surrender certain 700 MHz guard band Block B spectrum, which it holds in 40 markets; and recommends that the Commission rededicate that spectrum to public safety use. We note that the 700 MHz Guard Band's use for public safety applications, as proposed, is problematic. The 700 MHz Guard Band spectrum was anablished specifically to buffer 700 MHz public safety systems from interference by commercial systems operating in the Upper 700 MHz band. It would be anomalous in our view, to place public safety systems in the very interference-prone spectrum that we established to protect public safety.
- 209. We nonetheless will accept Nextel's 700 MHz Guard Band spectrum, but decline to redesignate it to public safety use at this time. Instead, we will consider the ultimate disposition of this spectrum in a future rule making proceeding. In this connection, we note that there are several potential public safety and public interest benefits that may be realized by a redesignation or reassignment of the 700 MHz Guard Band spectrum that Nextel offers to relinquish. However, we do not behave that the ultimate decision on how best to use the surrendered 700 MHz spectrum should be resolved in the context of this Report and Order. Rather, any such decision should rest on a record developed in a subsequent rule making proceeding. There, we may consider such issues as whether there are public safety applications that could exist satisfactorily in such spectrum consistent with our statutory authority; whether there is a demand for additional B/ILT spectrum that would be satisfied by access to the 700 MHz Guard Band spectrum; whether providing B/ILT licensees access to such spectrum would create opportunities for public safety to get access to additional 800 MHz band frequencies; whether there are other, new uses that may arise; and whether the 700 MHz Guard Band spectrum should be re-auctioned.

D. Appropriate Compensation for Band Reconfiguration

- 210. In the NPRM, the Commission discussed the "replacement spectrum" construct advanced by Nextel in its White Paper, i.e., that if Nextel were to pay the cost of band reconfiguration and vacate certain 700 MHz, 800 MHz and 900 MHz spectrum, it should be compensated on a "megahertz for megahertz" basis with spectrum nominally in the 2 GHz range. We sought comment on the relative value of the spectrum that Nextel proposed to surrender vs. the value of its desired replacement spectrum. In the Consensus Plan, Nextel proposed that, as compensation for its relinquishment of 700, 800 and 900 MHz spectrum rights and its commitment to pay 800 MHz incumbent relocation costs, it should receive a nationwide license for ten megahertz of spectrum in the 1.9 GHz band. Other parties contend that the value of the spectrum rights Nextel seeks substantially exceeds the value of spectrum rights it has offered to give up, and therefore would constitute an unwarranted windfall to Nextel.
- 211. We conclude that it is in the public interest to compensate Nextel for the surrendered spectrum rights and costs it will incur as a result of band reconfiguration. By facilitating band

⁵⁴⁴ See ¶¶ 335-337 infra.

⁵⁴⁵ See ¶ 61 supra.

reconfiguration, giving up spectrum rights and bearing the financial burden of the relocation process for all affected incumbents, we believe that Nextel has provided the quickest, most comprehensive and most cost-effective means of solving the 800 MHz public safety interference problem of all the alternatives presented or available to the Commission. In light of these substantial public interest benefits, we conclude that it is appropriate for Nextel to receive equitable compensation in the form of spectrum rights to the 1910-1915 MHz and 1990-1995 MHz bands, conditioned on its meeting the obligations imposed by this *Report and Order*. We specifically reject the proposal by some parties to grant Nextel rights to spectrum in the 2.1 GHz band as opposed to the 1.9 GHz band. Accordingly, we take those steps necessary to designate the 1.9 GHz spectrum for Nextel's use, and to provide for relocation and reimbursement by Nextel of incumbent users of the band.

212. We are sensitive to the argument made by several parties that granting Nextel spectrum rights in the 1.9 GHz band could result in an undeserved "windfall" to Nextel. To ensure that Nextel is treated equitably but does not realize any windfall gain, we provide for compensation of Nextel on a "value for value" basis. Under this approach, we first make a determination of the market value of the 1.9 GHz spectrum, based on valuation data provided by the parties and on our own analysis. Second, we provide that as offsets against this value, Nextel will receive credit for (1) the net value of the spectrum rights that Nextel is relinquishing to public safety, CII, and other 800 MHz licensees, (2) the actual cost of 800 MHz band reconfiguration (including both Nextel's costs to support relocation by other licensees and Nextel's own relocation costs), and (3) costs incurred by Nextel to clear the 1.9 GHz band, less any reimbursed expenses. Third, because we do not know at present what the costs of 800 MHz relocation and 1.9 GHz band-clearing will ultimately be, we provide for an accounting at the end of the transition period to determine the amount of these offsets and balance them against the value of Nextel's 1.9 GHz spectrum rights as determined by this Report and Order. 547

1. Public Interest Considerations for Granting Spectrum Rights to Nextel

- without recourse to the competitive bidding process is highly unusual. However, given the extraordinary circumstances present in this proceeding, including issues involving the safety of life and property—and absent harm to other interests of the public—we are convinced that our decision in this regard is consistent with the public interest. In reaching this decision, we are mindful that Congress has expressed a strong statutory preference in the vast majority of circumstances for use of auctions to assign spectrum rights. However, Congress has also established a clear exception for public safety services that protect life and property, exempting them from the requirement that they obtain spectrum on the auction block. We believe the same rationale applies to our decision here, where we are reconfiguring spectrum for non-economic reasons to benefit public safety and the public as a whole. This is not to say that economic factors are irrelevant—we regard economic analysis as germane to the question of whether our action today could inadvertently impair the public's access to affordable wireless communications services. We believe the record conclusively demonstrates that there will be no such unintended consequences.
- 214. Nevertheless, we reject the claim that assigning Nextel spectrum rights in another band as part of this comprehensive solution is unfair because Nextel is receiving "free" spectrum while its

⁵⁴⁶ See ¶¶ 217-222 infra.

⁵⁴⁷ See ¶ 329-332 infra.

⁵⁴⁸ These benefits may also have an economic component, though it is difficult to quantify. One study in the record posits that if improved public safety communications reduced the societal loss from crime and fire by one-tenth of one percent, the nation would save \$1 billion every year. See Nextel Sunfire Ex Parte at 10.

competitors must bid for spectrum at auction. First, given the obligations we place on Nextel in this Report and Order, and the mechanism we have established to prevent an undue windfall, its access to other spectrum is hardly "free." Second, Nextel is taking the very substantial risk that it could end up incurring costs that are greater than the value of the spectrum rights it receives. This is because we have not merely rubber-stamped the Consensus Parties' proposal, but have imposed significant obligations beyond what the parties proposed to ensure that the public receives full benefit in exchange for making other spectrum available to Nextel. Under this restructured solution, we are requiring Nextel to assume the following substantial—and to a large degree unpredictable—risks:

- Nextel must complete reconfiguration of the 800 MHz band regardless of the ultimate cost. Although Nextel estimated it will cost up to \$850 million to reconfigure the 800 MHz band, other parties contend that the actual cost will be far higher, e.g. CTIA claims that 800 MHz band reconfiguration cost could exceed \$3 billion. Thus, we are requiring Nextel to assume the risk that the cost of 800 MHz band reconfiguration could exceed any value Nextel ultimately realizes from the other spectrum.
- In order to ensure that the 800 MHz band will be reconfigured, we are requiring Nextel to obtain a \$2.5 billion letter of credit to both fund the reconfiguration and to serve as insurance against a Nextel default, including bankruptcy. The cost of such a letter of credit is substantial and was not factored into the Consensus Parties' estimates.
- Should experience as band reconfiguration progresses show that the ultimate cost is likely to exceed even the \$2.5 billion sum, *supra*, Nextel may be required to obtain additional letters of credit. Again, the financial risk associated with such additional letters of credit would be borne by Nextel.
- Nextel must meet the interim benchmark of the retuning Channels 1-120 in twenty NPSPAC Regions. ⁵⁵¹ If Nextel fails to meet the interim benchmark, for reasons that Nextel, with the exercise of due diligence, could reasonably have avoided, the Commission may consider and exercise any appropriate enforcement action within its authority, including assessment of monetary forfeitures or, if warranted, license revocation. ⁵⁵²
- Nextel must complete band reconfiguration within thirty-six months. If Nextel fails to meet this benchmark, for reasons that Nextel could reasonably have avoided, the Commission will determine whether forfeitures should be imposed and/or whether Nextel licenses, including, but not limited to, its 1.9 GHz licenses, should be revoked.
 - 215. We also consider the assignment of spectrum rights to Nextel to be necessary to achieve

⁵⁴⁹ See Letter, dated April 29, 2004, from Steve Largent, President and CEO CTIA to Michael Powell, Chairman, Federal Communications Commission at 2-3. See also n. 488-489 supra.

⁵⁵⁰ We note that Nextel's cost for such additional letters of credit likely would increase if Nextel's band reconfiguration progress did not meet projections, thus affecting the risk-analysis of the issuing bank(s).

⁵⁵¹ See ¶ 201 supra.

⁵⁵² We note that the Commission has issued Notices of Apparent Liability for Forfeiture assessing substantial penalties on carriers that have failed to comply with Commission rules intended to enhance the safety of life and property. See In re T-Mobile USA, Inc., Notice of Apparent Liability for a Forfeiture, 18 F.C.C.R. 3501 (EB 2003); see also In re AT&T Wireless Services, Inc., Notice of Apparent Liability for a Forfeiture, 17 F.C.C.R. 9903 (EB 2002).

our paramount goal of abating interference to 800 MHz public safety systems. As discussed in ¶61 supra, after more than two years spent examining a record of over 2200 filings, many of them incorporating detailed technical and economic studies, we are convinced that 800 MHz band reconfiguration is the only reliable and affordable means of achieving this goal. Moreover, only the Consensus Parties have proposed a band reconfiguration mechanism that guarantees public safety and other 800 MHz licensees the funds necessary to relocate themselves out of their current inter-leaved operational environment. We do not believe that our solution—which is adapted from the Consensus Parties' proposal—can be legally or equitably imposed without a compensatory assignment of spectrum rights to Nextel. We also note that many of Nextel's cellular competitors conduct their operations on spectrum they acquired at no cost, and that some of these same parties will benefit—at no cost to themselves—from reduced interference mitigation costs as a result of the band configuration carried out at Nextel's expense.

216. In sum, although our determination may not reflect complete financial exactitude, it is firmly grounded in our statutory authority as well as our agency expertise. The public interest that we are required to uphold often rests on such unquantifiable imperatives as those recited in the preamble of our organic statute; that we exist to regulate communications "for the purpose of the national defense, for the purpose of promoting safety of life and property." Thus, we find utmost consistency between our statutory charge and the certain value of Nextel's unique ability to abate the unacceptable interference that hinders our Nation's first responders in their supremely difficult task of defending against terrorism and ensuring the safety of our life and property. We believe the balance we have struck here is fair and equitable.

2. Choice of 1.9 GHz Replacement Spectrum

As discussed in the NPRM, we are applying two basic criteria in selecting replacement 217. spectrum for Nextel, and in considering the proposal in the Consensus Plan that Nextel be granted spectrum rights at 1910-1915/1990-1995 MHz: (1) the segment selection would have to be consistent with the highest and best possible use of the spectrum; and (2) there would have to be an acceptable plan for relocating incumbent licensees or reimbursing other users, e.g. BAS, FS licensees and UPCS.554 In making our selection, we also must decide whether to redesignate 1910-1915 MHz to permit the provision of licensed fixed and mobile services, an issue noticed in ET Docket 00-258. Based on the record evidence, in WT Docket 02-55 and in ET Docket 00-258, we are assigning the 1910-1915/1990-1995 MHz band segment as paired replacement spectrum for Nextel for the provision of licensed Fixed and Mobile services on a primary basis. In so doing, we have carefully balanced the competing recommendations for use of this band segment.⁵⁵⁵ We have determined that the need to facilitate the rebanding to remedy interference to 800 MHz public safety and CII communications systems, now and in the future, and to restore spectrum capacity lost by Nextel in the course of band reconfiguration, far outweighs the benefits of other potential use of this 1.9 GHz spectrum. 556 We find that providing replacement spectrum rights for Nextel is a sine qua non for elimination of unacceptable interference in

⁵⁵³ Communications Act of 1934, Title I, Section 1, 47 U.S.C. § 151.

⁵⁵⁴ See NPRM at 17 FCC Rcd at 4904 ¶ 57.

⁵⁵⁵ See ૣ 224-235 infra.

⁵⁵⁶ For a discussion of our legal authority to take this step in furtherance of the public interest see \P 62-87 supra.

the 800 MHz band.557

- 218. In several recent *ex parte* filings in this proceeding, CTIA argues that if the Commission is to award replacement spectrum rights to Nextel as part of this order, it should select spectrum in the 2.1 GHz band rather than the 1.9 GHz spectrum proposed by the Consensus Parties.⁵⁵⁸ CTIA points out that Nextel in its 2002 White Paper originally identified 2.1 GHz spectrum as potential replacement spectrum. CTIA further contends that the 2.1 GHz band is sufficiently comparable to the 1.9 GHz band that it would be suitable spectrum for Nextel's needs, although it may be slightly lower in value.⁵⁵⁹ In response, Nextel contends that 2.1 GHz would not be suitable replacement spectrum because of technical and operational deficiencies in comparison to 1.9 GHz.⁵⁶⁰
- 219. We conclude that the record does not support substituting 2.1 GHz for 1.9 GHz as proposed by CTIA We recognize that the Nextel White Paper identified 2.1 GHz as a potential replacement band, and that the Commission sought comment on this and other potential bands in the NPRM. However, when the Consensus Parties filed their initial proposal in August 2002, they specifically identified spectrum in the 1.9 GHz band as the proposed replacement spectrum for Nextel. During the comment and reply period, numerous commenters debated the Consensus Parties' proposal to use 1.9 GHz, but no commenter proposed further consideration of 2.1 GHz as an alternative or provided information regarding the characteristics or suitability of the band. CTIA's proposal to consider substituting 2.1 GHz for 1.9 GHz was not made until more than two years after we initiated this proceeding. Although several additional ex parte submissions have been filed in response to the CTIA proposal since then, we find that they have primarily raised additional issues and questions that would require further development of the record to resolve.
- 220. For example, Nextel cites a number of differences between 2.1 GHz and 1.9 GHz that Nextel contends significantly reduce the former's comparative utility and value. Nextel contends that developing 2.1 GHz subscriber equipment will be time-consuming and costly because it cannot readily be adapted from existing equipment designs, whereas existing PCS equipment can be adapted quickly with only minor changes to operate in adjacent 1.9 GHz spectrum. Nextel also points to different incumbency and band-clearing issues in the two bands, particularly the presence of fixed microwave incumbents in the 2.1 GHz band (some of them licensed to Nextel's competitors), which it contends will lead to greater cost and more uncertain time frames for clearing the band in comparison to 1.9. GHz as Nextel contends, or that if they do lower the value of 2.1 GHz in comparison to 1.9 GHz, this merely serves to reduce the risk that Nextel will receive a windfall. However, neither CTIA nor any other party has

⁵⁵⁷ We reach this conclusion based upon our assessment of the state of communications technology and its current deployment, and cognizant of our obligations pursuant to 47 U.S.C. § 151. See ¶ 211 supra.

⁵⁵⁸ See CTIA April 29 ex parte at 2; CTIA May 7 ex parte at 2. CTIA proposed that Nextel not receive 2.1 GHz spectrum until the rebanding process is complete. As discussed in ¶¶ 213-216 supra, we conclude that it is appropriate to grant spectrum rights to Nextel at the commencement of the rebanding process with those rights conditioned on the successful and timely completion of rebanding.

⁵⁵⁹ CTIA May 7 ex parte at 5.

⁵⁶⁰ Nextel May 14 ex parte 3-4.

⁵⁶¹ Id. at 4,

⁵⁶² Id. at 4.

⁵⁶³ CTIA May 7 Ex Parte at 5-6.

presented additional data or analysis to support these contentions. 564

- 221. We believe that Nextel has raised legitimate questions with respect to technical and operational differences between the 2.1 GHz band and the 1.9 GHz band. However, because of the late-developed and limited nature of the record regarding the 2.1 GHz band, we lack sufficient information from which to draw conclusions on how these differences might affect the relative suitability or value of the 2.1 GHz band. Therefore, further consideration of this option would require additional development of the record, which would significantly delay action in this proceeding. Given the already lengthy nature of this proceeding, and the urgency of the public safety interference problem we are addressing, such delay would not be in the public interest. In contrast to the limited record on 2.1 GHz, the record regarding the 1.9 GHz band is well-developed, and we are satisfied based on this record that awarding 1.9 GHz spectrum rights to Nextel, subject to the conditions and safeguards of this order, is fully consistent with our public interest goals and obligations. Accordingly, we see no reason to delay our decision to gather additional information on an uncertain alternative.
- 222. We also do not believe that issuing Nextel a bidding credit or auction discount voucher for unspecified future spectrum is an acceptable alternative to awarding it 1.9 GHz spectrum rights. We recognize that Nextel may need to apply revenues derived from 1.9 GHz service to meet its obligation to timely complete 800 MHz band reconfiguration. It can do so only if it is afforded timely and certain access to 1.9 GHz spectrum rights in exchange for vacating certain 800 MHz spectrum and assuming the cost of 800 MHz band reconfiguration. Reconfiguration of the 800 MHz band is essential to our goal of timely abating unacceptable interference to public safety, CII and other 800 MHz systems. Given the unique facts of this case, there is an inextricable connection between quick abatement of unacceptable 800 MHz interference and Nextel's quick access to additional spectrum. Neither a bidding credit nor an auction discount voucher would assure timely and certain access to the needed additional spectrum or the associated revenue.

3. Assignment of Spectrum Rights at 1.9 GHz to Nextel

223. We here take the necessary actions to assign to Nextel a ten-year license to the 1910-1915 MHz and 1990-1995 MHz bands. For the reasons described in detail below, we take action in ET Docket No. 00-258 to redesignate the 1910-1915 MHz band for licensed Fixed and Mobile services, to be used for AWS, and to pair that spectrum with the 1990-1995 MHz band. For the public interest reasons described above, we here also assign to Nextel a ten-year license by taking the necessary action in WT Docket No. 02-55. In light of this redesignation and assignment, we then adopt a UTAM reimbursement plan, and discuss how Nextel, as a new entrant, will participate in our existing relocation procedures for the 1990-2025 MHz band (in ET Docket No. 95-18).

⁵⁶⁴ Verizon states that would be prepared to bid a "substantial" amount for 2.1 GHz spectrum, but less than what it would bid for 1.9 GHz spectrum. Verizon May 27 Ex Parte at 3.

⁵⁶⁵ In addition to equipment costs and band-clearing issues, Nextel cites inferior propagation characteristics at 2.1 GHz in comparison to 1.9 GHz as reducing the relative value of 2.1 GHz spectrum. Nextel May 14 Ex Parte at 3-5. We accord very little weight to this factor: the differential free space path loss between 1.9 GHz and 2.1 GHz is less than one-tenth of a dB, and the attenuation due to foliage, precipitation, and other environmental factors is essentially identical for the two bands.

⁵⁶⁶ See Ex Parte presentation of James Kay, dated June 25, 2003, at 11.

a. Redesignation of the 1910-1915 MHz Band

- 224. We here redesignate the 1910-1915 MHz Band for licensed Fixed and Mobile services for AWS use on a primary basis, as opposed to continuing to dedicate this five megahertz band to unlicensed PCS or providing for an alternative licensed allocation. We also consider and deny various pending Petitions for Waiver and Petitions for Rulemaking that would instead have us waive or modify our current UPCS rules that apply to 1910-1915 MHz.
- 225. Redesignation. In the AWS Third NPRM, we sought comment as to whether we should redesignate all or a portion of the 1910-1930 MHz band, which is currently designated for UPCS, for licensed fixed and mobile services. Many commenting parties to the AWS Third NPRM endorse the introduction of higher power licensed services into all or a portion of the band. For example, Ericsson states that by allocating the spectrum at 1910-1915 MHz as part of a paired band the Commission can increase the value of this spectrum by putting it to a higher-value use. Ericsson predicts that such a redesignation, in conjunction with regulation pursuant to the Part 24 rules we have used for Broadband PCS, are likely to promote industry investment in the band, promote competition, and foster technological innovations in the 1910-1915 MHz band. 567 Commenting parties also assert that the 1910-1920 MHz band, or a portion thereof, would be best utilized for new and innovative services or as relocation spectrum for existing services. For example, Nextel states that it should be assigned rights to a portion of the spectrum (1910-1915 MHz) as replacement spectrum in conjunction with its Consensus Plan for the 800 MHz realignment. 568 Nextel reiterated its contention that relocating to this band from the public safety band at 800 MHz will help resolve public safety interference in the private land mobile bands and can be implemented without causing harmful interference to adjacent Broadband PCS operations. As another option, commenting parties including CTIA and Verizon assert that rights to the 1910-1915 MHz band should be allocated for PCS-like services, as part of a paired block.⁵⁶⁹ Proponents of this redesignation also state that it would provide efficient use of spectrum, improve global harmonization of spectrum, and achieve economies of scale. Finally, proponents of MDS state the 1910-1916 MHz band (as part of a pairing with the 1990-1996 MHz band) would provide suitable replacement spectrum rights for MDS operations in the 2.1 GHz band.⁵⁷⁰ We note that many of the commenting parties who endorse high-power use of the 1910-1915 MHz band also discuss the extent to which we could reduce the existing separation between the Broadband PCS bands at 1850-1910 MHz and 1930-1990 MHz without causing harmful interference to existing Broadband PCS operations or requiring the use of filters, power reduction, or other protective measures that would increase the cost of deploying new high-powered

⁵⁶⁷ Ericsson Comments to AWS Third NPRM at 3-4.

⁵⁶⁸ Nextel Comments to AWS Third NPRM at 5-12.

⁵⁶⁹ See, e.g., CTIA Comments to AWS Third NPRM at 2; Verizon Comments to AWS Third NPRM at 5. See also Ascom Comments to AWS Third NPRM at 2 (agreeing with re-designation of 1910-1920 MHz for fixed and mobile uses); Motorola Comments to AWS Third NPRM at ii, 3 (agreeing with re-designation of 1915-1920 MHz for PCS use).

⁵⁷⁰ See, e.g., Ad Hoc Comments to AWS Third NPRM at 4-5; Cingular Comments to AWS Third NPRM at 4 (stating that allocation will add flexibility for MDS to provide fixed and mobile services); DCT Los Angeles (DCT) Comments to AWS Third NPRM at 14; Nucentrix Comments to AWS Third NPRM at 11-13 (asserting that MDS proponents have worked to provide technically viable solution for displaced MDS that no other proponents of various allocation schemes have submitted); WCA Comments to AWS Third NPRM at 13, 18. In the Second R&O, we reallocated MDS spectrum at 2150-2155 MHz for AWS. MDS Channels 1 and 2/2A consist of the 2150-2160/62 MHz band. While our recent decision to relocate MDS channels 1 and 2 to the 2.5 GHz band, discussed infra, makes these proposals moot, we believe that they continue to be of value to this proceeding insofar that they illustrate commenters' beliefs that high-powered services could occupy the band.

licensed systems within the 1910-1930 MHz band or otherwise limit its usefulness.⁵⁷¹ Generally, the commenting parties supporting reallocating this five megahertz portion for high-power operations also state that it would be feasible to leave a fifteen megahertz separation between Broadband PCS bands without causing mobile-to-mobile and base-to-base interference.⁵⁷²

Rather than redesignate the 1910-1920 MHz band for new licensed mobile services, some commenting parties state that isochronous UPCS should be redesignated for use throughout the whole UPCS band. For example, UTAM and Peñasco Valley Telephone Cooperative (PVT) state that the public interest supports retaining the entire 1910-1930 MHz band for UPCS with technical modifications to enable isochronous devices to use the asynchronous band.⁵⁷³ Commenting parties state that retaining this ten megahertz of spectrum for unlicensed use would both maintain an adequate separation between the licensed PCS mobile and base transmit bands and meet the growing demands for UPCS devices.⁵⁷⁴ Specifically, ICO Global Communications (ICO) and Motorola indicate that the growing demand for UPCS devices and need for more isochronous UPCS spectrum supports the expansion of isochronous spectrum. 575 JSM Electronics, Inc., and UTStarcom have proposed use of the 1910-1915 MHz spectrum for the deployment of community wireless network systems.⁵⁷⁶ We also note that some commenting parties ask that we extend isochronous UPCS use to an additional five megahertz in the 1915-1930 MHz band, particularly in the event that we redesignate the 1910-1915 MHz band segment. Proponents of this option claim that isochronous UPCS should be extended because the current asynchronous designation has not resulted in service, continued low power (UPCS) use would reduce potential interference to high power adjacent band Broadband PCS licensees, and demand exists to expand unlicensed voice applications beyond the existing ten megahertz. 577 Siemens, for example, suggests that by extending isochronous UPCS use to the 1915-1920 MHz band and implementing several technical changes to the

⁵⁷¹ See, e.g., Motorola Comments to AWS Third NPRM at 4; Verizon Comments to AWS Third NPRM at 5, Ericsson Comments to AWS Third NPRM at 3, Lucent Reply Comments to AWS Third NPRM at 2.

⁵⁷² See, e.g., Ad Hoc Comments to AWS Third NPRM at 5; CTIA Comment to AWS Third NPRM at 3; Nextel Comments to AWS Third NPRM at 11-12; UTAM Comment to AWS Third NPRM at 4; Verizon Comments to AWS Third NPRM at 5-6.

⁵⁷³ UTAM Comments to AWS Third NPRM at 2; PVT Reply Comments to AWS Third NPRM at 2-3; See also UTStarcom Comments to AWS Third NPRM at 3-4 (proposes community wireless systems in UPCS extended band); Inventel Reply Comments to AWS Third NPRM at 2; Midstate Communications (Midstate) Reply Comments to AWS Third NPRM at 2 ("Leaving UCPS spectrum for unlicensed use will encourage deployment of niche services and local mobility applications that show great promise to benefit consumers in rural, underserved and tribal areas"); PBC Reply Comments to AWS Third NPRM at 2.

⁵⁷⁴ See, e.g., UTAM Comments to AWS Third NPRM at 4-5 (stating record does not show evidence that reduction of spectrum by ten megahertz is feasible, and evidence shows something to the contrary).

⁵⁷⁵ Ericsson Comments to AWS Third NPRM at 5; ICO Comments to AWS Third NPRM at 5; Motorola Comments to AWS Third NPRM at 8-10.

⁵⁷⁶ JSM Comments to AWS Third NPRM at 2; UTStarcom Comments to AWS Third NPRM at 4-5.

See, e.g., Ascom Comments to AWS Third NPRM at 2; Siemens Comments to AWS Third NPRM at 2; Verizon Comments to AWS Third NPRM at 6; WCA Comments to Third NRPM at 17, 20; See also Ericsson Comments to AWS Third NPRM at 5 (stating that such an expansion is consistent with current use of spectrum); Siemens Comments to AWS Third NPRM at 3 (noting that expansion improves spectrum efficiency and reduces levels of interference, thereby enhancing quality of service); Cingular Comments to AWS Third NPRM at 2-3 (support retaining 1916-1930 MHz for UPCS).

Rules, the Commission could allow for the introduction of products using DECT technology into the United States.⁵⁷⁸

- 227. Based on the record, we conclude that the public interest would be best served by redesignating five megahertz of spectrum in the 1910-1915 MHz band for licensed Fixed and Mobile services on a primary basis to support the types of high-powered mobile applications associated with AWS, Broadband PCS expansion, and Nextel's mobile operations. We note that there is strong support for such a designation in the record, and we agree with those parties that assert that such a designation will promote efficient use of the spectrum, allow for the rapid introduction of high-value services, and otherwise serve the public interest.
- Even if the demand for isochronous devices is growing or similar unlicensed voice applications (such as those associated with community wireless networks) could be deployed in the band, we cannot conclude that such use would be preferable to the types of higher powered licensed applications that the band could support. The proven public demand for licensed mobile services and the need to provide additional spectrum to support their continued deployment leads us to conclude that designation of this spectrum to licensed Fixed and Mobile services will allow us to put this spectrum to a higher use than it can serve as unlicensed spectrum. Moreover, no commenter has suggested that asynchronous applications for the band will be developed or deployed in the near future and those parties that promote expanded voice applications in the band would only offer deployment in limited geographic areas or urban locations where the 1920-1930 MHz band is already put to high use. By contrast, the redesignation of this band to licensed use would promote the rapid and widespread introduction of services into spectrum that heretofore has lain fallow.
- 229. We note that by assigning these spectrum rights to Nextel we preclude other AWS-like use, on which we sought comment in the AWS Third NPRM, including expansion of the existing Broadband PCS bands and allocation of this spectrum to MDS as replacement spectrum. However, such use does not offer us the ability to resolve the critical public safe. Issues that we will be able to address by assigning the spectrum to Nextel. Also, we note that the proposal by MDS proponents to redesignate the 1910-1916 MHz band paired with the 1990-1996 MHz band as replacement spectrum for MDS channels 1 and 2 has been rendered moot by our recent decision in which we established a relocation plan for those MDS channels in conjunction with the restructuring of the 2.5 GHz band.
- 230. Finally, we note that while we are re-designating the 1910-1915 MHz band segment for Fixed and Mobile services, we do not address the 1915-1920 MHz band segment at this time. Commenting parties generally concur that Broadband PCS mobile and base transmit bands will be able to

⁵⁷⁸ See ex parte Comments of Siemens Corp., et. al. filed in ET Docket 00-258 on December 12, 2003. DECT is a digital wireless technology that originated in Europe and is used in a variety of wireless applications, including cordless telephones and wireless office telecommunications products.

⁵⁷⁹ See, e.g., Ad Hoc Comments to Third NPRM at 4; Cingular Comments to Third NPRM at 4; WCA Comments to Third NPRM at 12-13. Because this decision exclusively considers the resolution of allocation matters in the 1910-1915 and 1990-1995 MHz bands, we make no decision herein with respect to relocation of MDS operations other than to conclude that assignment of this spectrum to Nextel best serves the public interest

⁵⁸⁰ Amendment of Parts 1, 21, 73, 74 and 101 of the Commission's Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, et al.; WT Docket Nos. 03-66, et al., Report and Order and Further Notice of Proposed Rulemaking, FCC 04-135 (rel. Jul. 29, 2004) (2.5 GHz MDS Restructuring R&O and NPRM).

continue to operate with a duplexer gap of fifteen megahertz without causing interference to each other. Because we are not modifying the existing designation for the 1915-1920 MHz band, we need not consider at this time those comments that discuss whether or how we could preserve an adequate separation gap between the Broadband PCS bands if we were to redesignate spectrum above 1915 MHz for high-power licensed services. Furthermore, we are retaining the option to, *inter alia*, use the 1915-1920 MHz band for AWS use or in conjunction with an expansion of our UPCS rules to allow for expanded voice-based applications, but will address these matters in a subsequent action.

- 231. Accordingly, we find ample support in the record for allowing high-powered use of the 1910-1915 MHz band segment and that such use can occur without causing interference to existing Broadband PCS operations. For the reasons stated above, we are re-designating the 1910-1915 MHz band for licensed Fixed and Mobile services and updating our Part 15 rules to remove the 1910-1915 MHz band from asynchronous UPCS use.
- 232. Petitions for Rulemaking and Petitions for Waiver Regarding the 1910-1930 MHz Band. As mentioned, supra, the under-utilization by unlicensed devices of the 1910-1920 MHz band has prompted the filing of four petitions for waiver from Lucent, UTStarcom & Drew University, Ascom, and Alaska Power; and two petitions for rulemaking from WINForum and UTStarcom, which all request certain rule changes to these bands.
- In its petition for waiver, Lucent requests that it be allowed to use the 1910-1920 MHz band for its Definity PBX voice system within the confines of Cook County, Illinois, It claims that several of its customers need high-capacity indoor wireless communications and that the existing ten megahertz of spectrum reserved for voice in the 1920-1930 MHz band is insufficient to meet those needs. Also, UTStarcom & Drew University request permission to use the 1910-1920 MHz band to install the UTStarcom Personal Access System (PAS) on the campus of Drew University in Madison, New Jersey, in order to provide wireless telephone service to the students and staff, as an extension of the university's wired telephone system. It states that the PAS system complies with Japan Personal Handy Phone System (PHS) Standard RCR-28 but does not meet Part 15 requirements for either isochronous or asynchronous devices and typically operates at higher power levels than mandated by Part 15. It further states that once Broadband PCS Block C licensees are selected in Auction #35 (for the 1895-1910 MHz band paired with the 1975-1990 MHz band) it would be possible to negotiate use of that spectrum on the Drew University campus with the winning licensee. In addition, Ascom requests that it be allowed to use the 1910-1920 MHz band for its Freeset DCT 1900 PBX voice system within the confines of Cook County, Illinois: New York City: and San Francisco County, California, because several of its customers, who are boards of trade or stock exchange entities, need high-capacity indoor wireless communications. Ascom submits that the ten megahertz of spectrum reserved for voice in the 1920-1930 MHz band is, again, insufficient to meet such needs. Finally, Alaska Power requests a waiver of Part 15 asynchronous spectrum etiquette to operate a community wireless voice system over the 1910-1920 MHz (data) band, in order to serve small rural areas in Alaska that are currently unserved or underserved by wireless service providers.
- 234. In its petition for rulemaking, WINForum asks the Commission to allow isochronous UPCS devices to use the 1910-1920 MHz band and to phase out asynchronous use in this band, thereby providing twenty megahertz of spectrum (1910-1930 MHz) for isochronous devices, and also to modify certain technical requirements for UPCS devices in Part 15. WINForum further requests that the Commission modify the frequency stability requirements for asynchronous UPCS data devices.⁵⁸¹ In its

⁵⁸¹ Id. at 15-16. Currently, 47 C.F.R. §15.321(e) requires the measurement of the carrier frequency in order to ensure its frequency stability. WINForum believes that for asynchronous data devices that transmit in short bursts, explicit measurement of the carrier frequency as a function of time for a short modulated burst is inherently (continued....)

petition, UTStarcom requests that the 1910-1920 MHz band be made available for licensing via competitive bidding to permit the establishment of community wireless network service, using its PAS which is based on Japan's RCR-28 Personal Handy Phone System (PHS) standard. Subsequently, UTStarcom modified its requests to seek changes to the Part 15 rules for coordinated unlicensed operation in the 1910-1920 MHz band for its PAS system, with coordination performed by UTAM, using the existing UTAM coordination infrastructure. Start

Fixed and Mobile services for AWS use, we deny in part the waiver petitions from Lucent, Ascom, Alaska Power, and UTStarcom and Drew University insofar as they request use of spectrum in the 1910-1915 MHz band. We also deny in part the petitions for rulemaking from WINForum and UTStarcom. Again, our decision to deny in part the rulemaking petitions is made only with respect to the 1910-1915 MHz band, and is based on the fact that re-designation of this band precludes the petitioners' requests to use the entire 1910-1920 MHz band for expanded unlicensed applications. At this time we are not deciding the disposition of the 1915-1920 MHz band, and so we do not address the petitions for waivers and petitions for rulemaking with respect to this five megahertz band segment. To the extent that these parties can operate without use of spectrum in the 1910-1915 MHz band, we will further address their petitions when we consider the disposition of the 1915-1920 MHz band.

b. Pairing the 1910-1915 MHz and 1990-1995 MHz Bands

- 236. As part of our proposal in ET Docket 00-258 to redesignate the 1910-1920 MHz band (or a portion thereof) in the AWS Third NPRM for Fixed and Mobile Services, we also proposed options for pairing the 1910-1920 MHz band with the 1990-2000 MHz band for the redesignation of AWS, expansion of Broadband PCS, or the relocation of existing services. Such a pairing was made possible because, in the Report and Order portion of that decision, we redesignated the 1990-1995 MHz band to the Fixed and Mobile Services as part of our restructuring of the 2 GHz MSS band.
- 237. Those parties that support use of the 1910-1915 MHz band for high power licensed services generally agree with our proposal to pair the band with an equal amount of spectrum from the 1990-1995 MHz band. For example, CTIA (which supports pairing 1915-1920 MHz with 1990-1995 MHz for a PCS-like terrestrial wireless service), notes that such a pairing would benefit from the design of high-power PCS equipment in the adjacent Broadband PCS bands, which in turn would promote the rapid design and deployment of new systems and result in economies of scale. Proponents of the CTIA proposal also assert that this pairing would maximize the value of the spectrum by achieving greater spectrum efficiency. For example, Cingular states that a pairing of the 1910-1916 MHz and 1990-1996

⁵⁸² See UTStarcom Petition at 2.

⁵⁸³ See UTStarcom Reply Comments to AWS Third NPRM at 3.

⁵⁸⁴ AWS Third NPRM, 18 FCC Rcd 2223 ¶¶ 47-49.

⁵⁸⁵ AWS Third R&O, 18 FCC Rcd 2223 ¶ 28.

⁵⁸⁶ CTIA Comments to AWS Third NPRM at 2. See also Ericsson Comments to AWS Third NPRM at 3; Nextel Comments to AWS Third NPRM at 10.

MHz bands would provide flexibility for MDS licensees to provide fixed and mobile services. 587

238. We agree with Nextel, CTIA, and other parties that a pairing of the 1910-1915 MHz with 1990-1995 MHz bands would allow for the rapid introduction of terrestrial wireless services. Many potential high-power licensed mobile service providers—including Nextel—are designed to operate on distinct base station transmit and mobile receive bands that incorporate adequate frequency separation between the bands. Thus, paired use of these two five megahertz blocks is consistent with many possible technologies, such as the IMT-2000 standards being considered for AWS and the request of Nextel and WCA for relocation spectrum. These paired bands are located immediately upper adjacent to the existing Broadband PCS bands and is therefore consistent with both the band location and frequency separation between bands that has allowed for the successful design and deployment of Broadband PCS systems. In addition, because the 1910-1915 MHz band lacks incumbent UPCS users, new licensees will only need to address relocation as it pertains to the relocation of incumbent point-to-point microwave systems in the band. For these reasons, we will license the 1910-1915 MHz and 1990-1995 MHz bands as a pair to promote the most efficient use of this spectrum.

c. Relocation and Cost Sharing Obligations in the 1910-1915 MHz Band

- 239. Since we have assigned Nextel spectrum rights to the 1910-1915 MHz band, *supra*, we are imposing on Nextel an obligation to relocate remaining incumbent microwave links anywhere in the 1910-1930 MHz band operating on a primary basis wherever commencement of Nextel operations in the 1910-1915 MHz band would cause harmful interference to such links. We also consider, in more detail, Nextel's cost sharing obligations in the 1910-1915 MHz band.
- 240. The Commission's relocation policies with respect to PCS spectrum, including UPCS spectrum, has generally been to require new entrants to relocate, before commencing operations in a location, any existing incumbent microwave links that would otherwise experience harmful interference from those operations. In its comments Nextel has committed to fund its *pro rata* share of any additional band clearing if it were provided spectrum at 1910-1915 MHz. Therefore, we here impose an

⁵⁸⁷ Cingular Comments to AWS Third NPRM at 4-5. See also DCT Los Angeles Comments to AWS Third NPRM at 14.

⁵⁸⁸ Nextel Comments to AWS Third NPRM at 10; CTIA Comments to AWS Third NPRM at 2.

Microwave systems operating with paired frequencies use the 1910-1930 MHz band paired with the 2160-2180 MHz band. We note that UTAM previously relocated certain microwave incumbents from the 1910-1920 MHz band in conjunction with the designation of the 1910-1930 MHz band for UPCS use. We discuss relocation and reimbursement procedures for the 1910-1915 MHz band to account for the re-designation in ¶ 239-249, infra. We observe that the rules adopted in the 1992 Emerging Technologies proceeding apply to this band. Emerging Technologies First Report and Order and Third Notice of Proposed Rule Making, 7 FCC Rcd at 6890 ¶ 23-24. This relocation right was affirmed in the Emerging Technologies Memorandum Opinion and Order and Third Notice of Proposed Rulemaking and Order, 13 FCC Rcd 23949 (1998). The rules are codified in 47 C.F.R. §§ 101.69-101.99. Because these procedures are well known, parties can move expediently to initiate any relocation deemed necessary (to the extent that UTAM has not already completed such work). For these reasons, we believe that service providers can roll out service in this band quickly.

⁵⁹⁰ As discussed *supra*, we further conclude that it serves the public interest to assign this paired spectrum block to Nextel in conjunction with our efforts to resolve public safety interference issues in the 800 MHz band.

⁵⁹¹ 47 C.F.R. § 24.239.

⁵⁹² See Nextel Comments to the Third NPRM at 16.

obligation on Nextel to relocate any such incumbent links operating on a primary basis. 593

- 241. With respect to cost sharing obligations, in the AWS Third NPRM, we proposed that if we were to redesignate all or a portion of the 1910-1920 MHz band, we would implement a reimbursement plan that would repay UTAM a percentage of the expenses it incurred in clearing the UPCS band of microwave links. We sought comment on this proposal and the method by which UTAM should be repaid. Those parties that commented on this issue generally agree with our proposal, and support the adoption of a reimbursement plan that would compensate UTAM for its expenses. 595
- 242. UTAM, which supports retention of the entire 1910-1920 MHz band for UPCS, also states that in the event we redesignate spectrum in this band, we must ensure that new licensees fully and fairly compensate UTAM for the relocation of incumbent microwave users. In its comments, UTAM generally concurs that the reimbursement plan we proposed—which is based on the cost-sharing model we previously adopted for the relocation of microwave incumbents to allow for the introduction of licensed PCS—would provide such compensation.
- In addition, UTAM raises several points as to how we should implement a reimbursement 243. plan for redesignated UPCS spectrum. First, UTAM states that its compensation must be adjusted to include the base pro rata percentage of total costs it has incurred. To do this, UTAM notes that certain of its microwave relocation cost-sharing obligations are being paid in installments for links that have been moved by third parties, and asks that it be compensated for the pro-rata share of the present value of these future costs in one lump sum. 596 Second, UTAM states that new licensees should be required to follow the same cost-sharing rules as existing licensees that are adjacent to the UPCS band. In other words, if UTAM relocates a microwave link that accrues to the benefit of a new licensee, UTAM believes that the new licensee should be responsible for paying the relocation costs proportion to the number of licenses benefiting from the relocation. This same cost-sharing obligation would apply to UTAM paying for reimbursement if a licensee relocated a link that accrued to the benefit of UTAM's members.⁵⁹⁷ Also, UTAM states that a new licensee should, as a precondition to the grant of a license, be required to make its reimbursement payment to UTAM. This precondition, UTAM claims, would be similar to that of the payment of auction funds as a prerequisite to licensing. New licensees would therefore be able to factor the microwave relocation payment into a licensee's bidding strategy, in the event the spectrum is auctioned. 598 Finally, UTAM suggests that we consider allocating reimbursement costs among multiple new licensees entering the band by POPs as an effective, simple, and manageable means of cost recovery.599

⁵⁹³ This obligation ends on the sunset date, at which time individual operations in the band will become secondary. See 47 C.F.R. § 101.79.

⁵⁹⁴ AWS Third NPRM, 18 FCC Rcd 2223 ¶¶ 29-30.

⁵⁹⁵ UTAM Comments to *AWS Third NPRM* at 6-7; Nextel Comments to *AWS Third NPRM* at 15-16; PCIA Comments to *AWS Third NPRM* at 4-5.

⁵⁹⁶ UTAM Comments to AWS Third NPRM at 6.

⁵⁹⁷ Id.

⁵⁹⁸ Id at 7.

⁵⁹⁹ *Id.* POP is an abbreviated term for population used by the Commission. One pop equals one person. The Commission currently uses the 1990 census as a measure of population. *See* http://wireless.fcc.gov/auctions/glossary.html.

- 244. Nextel also agrees with our proposal for reimbursing UTAM incurred relocation costs. Nextel states that if it were relocated to 1910-1915 MHz, it will reimburse UTAM the band-clearing costs related to relocating incumbent microwave facilities from this five megahertz block of spectrum. Specifically, Nextel states that it agrees that UTAM should be entitled to receive a proportional share of the total expenses UTAM will have incurred to relocate microwave incumbents from the 1910-1930 MHz band as of the effective date of any final rules adopted in this proceeding. 600 Nextel also states that it would fund a pro rata share of any additional band clearing costs that are incurred following assignment of the spectrum block. 601 PCIA, which also supports our general relocation proposal, proposes that we establish a band-clearing cost-sharing clearinghouse to manage the relocation compensation in the allocation of UPCS bands to AWS. 602 PCIA states that many AWS licensees would benefit from UTAM relocating incumbent microwave links from the UPCS bands, because AWS licensees licensed in different geographic service areas could cause interference to or receive interference from a single incumbent licensee. PCIA therefore submits that a band-clearing cost-sharing clearinghouse needs to be developed to fairly reimburse UTAM, similar to the cost-sharing procedures for PCS in Part 24 of the Commission's Rules.603
- 245. In conjunction with our re-designation of the 1910-1915 MHz band for licensed Fixed and Mobile services, we find that UTAM must be fully and fairly reimbursed for relocating incumbent microwave users that operate on a primary basis in this band. We agree with commenting parties, such as Nextel, that UTAM should be made whole for the investments it has made in clearing the UPCS bands. We also find that in view of our assignment of this spectrum to Nextel, it is appropriate to require Nextel to reimburse UTAM twenty-five percent of UTAM's total relocation costs associated with relocation of incumbents from the 1910-1930 MHz band as of the date of assignment of the 1910-1915 MHz spectrum block to Nextel. We also agree with UTAM that we should apply the same cost-sharing obligations to Nextel that we have imposed on licensees on channels that are adjacent to the UPCS bands. 604 Thus, we will allow Nextel or UTAM to seek reimbursement for the proportion of its relocation costs that benefits spectrum whose relocation obligations would otherwise be borne by the party that uses or is otherwise responsible for that spectrum band. For example, if in order to make spectrum in the 1910-1915 MHz band available for use, Nextel relocates microwave links in both the 1910-1915 MHz and the 1915-1930 MHz bands. Nextel may seek reimbursement from UTAM for the actual costs associated with the relocation of the microwave links in the 1915-1930 MHz band. 605
 - 246. Our decision to require Nextel to reimburse UTAM a pro rata share of costs, in addition

⁶⁰⁰ Nextel Comments to AWS Third NPRM at 15.

⁶⁰¹ Id. at 15-16. See also Nextel Reply Comments to AWS Third NPRM at 6.

⁶⁰² Cost-sharing procedures for relocation of microwave incumbents are found in § 24.239 through § 24.253 of the Commission's Rules.

⁶⁰³ PCIA Comments to AWS Third NPRM at 4-5.

⁶⁰⁴ UTAM Comments to AWS Third NPRM at 6.

any future microwave relocation costs in the 1910-1930 MHz band. If UTAM funds the relocation of a paired microwave link where only one half of the paired link operates in the 1910-1915 MHz band and the relocation costs are evenly divisible between both links, then Nextel would be liable to reimburse UTAM for one half of the total relocation costs associated with that paired link. Because we are not altering the current allocation of the 1915-1920 MHz band at this time, we are not modifying the existing procedure whereby UTAM is responsible for costs associated with the relocation of incumbent microwave facilities in that band.

to being consistent with the comments supporting a reimbursement mechanism for UTAM, offers a fair and easy procedure to implement. Because UTAM has already cleared most of the incumbent microwave links deployed across the entire 1910-1930 MHz band, this reimbursement plan represents the most reasonable and easiest approach to address the relocation costs that UTAM has already incurred. We believe that such a course is superior to the difficult and complex prospect of making retroactive calculations for apportionment and represents an equitable and administratively efficient means of compensating UTAM. We note that no party has objected to this approach.

- 247. Our decision to assign the 1910-1915 MHz band to Nextel makes several portions of UTAM's comments and PCIA's clearinghouse proposal unnecessary to implement a reimbursement plan for the band. UTAM states in its comments that a new licensee should be required to make its reimbursement payment to UTAM as a precondition to the grant of its license. We are requiring Nextel to reimburse UTAM as condition precedent to commencing operations in the 1.9 GHz band. Our decision to provide Nextel a nationwide license for the 1910-1915 MHz block obviates our need to consider UTAM's suggestion to allocate reimbursement costs among multiple licensees entering the band by POPs. This decision also renders moot evaluation of PCIA's proposal to adopt a band-clearing cost-sharing clearinghouse for bands allocated for AWS with respect to the 1910-1915 MHz band because there will be no complex sharing issues among multiple new entrants or among entities operating in less-thannationwide service areas.
- 248. We also do not believe that it is necessary for us to require Nextel to immediately pay UTAM a share of the present value of UTAM's future installment payment obligations made to third parties. Again, because Nextel will be the sole nationwide license in this band, UTAM and Nextel will be able to address such matters as part of the overall process of accounting for and funding relocation obligations. Finally, we note that the decisions made today only apply to the 1910-1915 MHz band. Therefore, we are not addressing how the proposals by UTAM and PCIA regarding reimbursement and cost-sharing would affect any future proceeding that considers redesignation of the 1915-1920 MHz band.
- 249. Accordingly, we adopt a reimbursement plan that entitles UTAM to twenty-five percent—on a pro rata basis—of its total costs incurred as of the date that Nextel gains access to the 1910-1915 MHz spectrum band. Nextel must pay this amount before it begins operations in the band. Afterward we will allow Nextel and UTAM to seek reimbursement for the proportion of its relocation costs incurred in clearing incumbent fixed microwave systems that benefits spectrum whose relocation obligations would otherwise be borne by the party that uses or is otherwise responsible for that spectrum band. UTAM and Nextel shall reimburse those based on the actual costs associated with the relocation of these facilities.

d. Relocation and Cost Sharing Obligations in the 1990-1995 MHz Band

250. In this section, we address Nextel's obligations, as a new entrant, to relocate incumbent BAS systems in the 1990-1995 MHz band. As an initial matter, we are not altering the underlying relocation rules that we established for MSS entrants that undertake the relocation of BAS incumbents from the 1990-2025 MHz band and MSS licensees will continue to follow the procedures that the

⁶⁰⁶ We do not suggest that Nextel is not obligated to reimburse UTAM a *pro rata* share of such expenses—only that the timing and means of this reimbursement is best left to the parties to negotiate within the thirty-six month band reconfiguration process.

 $^{^{607}}$ Nextel must also meet other conditions precedent to the commencement of operations in the 1.9 GHz band. See ¶¶ 344,347 infra.

Commission adopted in the MSS Third R&O when relocating BAS incumbents.⁶⁰⁸ We are, however, modifying on reconsideration one aspect of the existing MSS plan to relocate BAS incumbents in order to allow Nextel to enter into the band and to address BAS relocation issues raised in the petitions for reconsideration of the MSS Third R&O. By retaining the existing MSS relocation rules but also overlaying procedures by which Nextel may relocate BAS incumbents, we will be able to ensure the continuity of BAS during the transition. It is essential that we do so, because BAS is a critical part of the broadcasting system by which emergency information and entertainment content is provided to the American public. Therefore, we expect that Nextel and MSS licensees will work together to minimize the disruption BAS licensees will experience in the transition.

(i) Nextel-BAS Plan

- 251. MSTV-NAB-Nextel BAS Relocation Plan. On May 3, 2004, MSTV, NAB, and Nextel submitted a proposed BAS relocation plan, which offered a means to clear BAS licensees from the 1990-2025 MHz band. Under this proposal, Nextel would commit to funding the entire cost of relocating all BAS incumbents nationwide from the 1990-2025 MHz band. Specifically, Nextel proposes to complete the relocation of all BAS licensees in the 1990-2025 MHz band in all markets in two stages—stage one within eighteen months and stage two within thirty months after the effective date of a Commission order in this proceeding.
- 252. We will require Nextel, as a condition on Nextel's 1.9 GHz licenses, to follow a relocation procedure based on its proposed BAS relocation plan and relocate all BAS licensees in the 1990-2025 MHz band within thirty months after the effective date of this *Report and Order*, as described below. We believe that the parties' proposed BAS relocation plan is sufficiently similar to the BAS relocation plan the FCC adopted for MSS entrants, which was modeled on the policies set forth in our earlier *Emerging Technologies* proceeding, 612 and which requires MSS entrants to provide comparable facilities to BAS incumbents that are relocated prior to the sunset dates specified in the *MSS Third*

 $^{^{608}}$ See ¶ 56 supra. As noted earlier, we will address the petitions for reconsideration or clarification of BAS relocation decisions made in the MSS Third R&O in this proceeding. We will, however, address the FS relocation issues raised in the pending joint petition for reconsideration or clarification of the MSS Third R&O at a later date.

⁶⁰⁹ See MSTV/NAB/Nextel May 3, 2004 Ex Parte. This plan was also supported by SBE. See ex parte comments, dated May 7, 2004, from SBE (SBE May 7, 2004 Ex Parte).

⁶¹⁰ In return, Nextel requests that the Commission assign to Nextel replacement spectrum in the 1910-1915/1990-1995 MHz bands and receive credit for BAS relocation costs. MSTV/NAB/Nextel May 3, 2004 Ex Parte at 2.

⁶¹¹ MSTV/NAB/Nextel May 3, 2004 Ex Parte at 2-3. The parties also note that "these targets may be adjusted to take into account issues regarding the availability of equipment, tower crews and other installation technicians." Id. at 3.

⁶¹² See Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, ET Docket No. 92-9, First Report and Order and Third Notice of Proposed Rule Making, 7 FCC Rcd 6886 (1992); Second Report and Order, 8 FCC Rcd 6495 (1993); Third Report and Order and Memorandum Opinion and Order, 8 FCC Rcd 6589 (1993); Memorandum Opinion and Order, 9 FCC Rcd 1943 (1994); Second Memorandum Opinion and Order, 9 FCC Rcd 7797 (1994); aff'd Association of Public Safety Communications Officials-International, Inc. v. FCC, 76 F.3d 395 (D.C. Cir. 1996) (collectively, "Emerging Technologies proceeding").

R&O.⁶¹³ Accordingly, we will also require Nextel to provide comparable facilities to BAS incumbents that are relocated.⁶¹⁴ Further, Nextel and MSS licensees, each of which individually are authorized to operate on a fraction of the band, will mutually benefit from the clearance of all BAS licensees in the band.⁶¹⁵ Nextel is therefore obligated to participate in the relocation of all BAS operations from 1990-2025 MHz, as discussed immediately below, even if it ultimately does not build its own facilities in some geographic areas. As we determined in the MSS Third R&O, a one-phase relocation plan avoids the possibility of BAS operations on three different band plans, and eliminates the potential disruption and down time to BAS associated with being relocated under two different phases in a short period of time.⁶¹⁶ We also note that our decision to accommodate Nextel's entry into the band does not alter our need to minimize the disruption to incumbent BAS operations during the transition. Therefore, we believe that including Nextel as a participant in the relocation of all BAS operations from the 1990-2025 MHz band strikes an appropriate balance that is not unreasonably burdensome upon Nextel as an entrant in the band, while also fair to the incumbents and MSS entrants.

- Relocation Schedule. Under the BAS relocation plan, MSTV, NAB, Nextel, SBE and 253. other interested broadcast parties will develop a joint relocation schedule and implementation plan to be submitted to the Commission. The joint implementation plan would address the timing of individual market relocations within the two-stage plan that will be completed within thirty months, measures to minimize disruption to ENG services during the transition, and measures to facilitate an expeditious and efficient relocation process. The joint relocation schedule will be based on the following criteria: during stage one, Nextel will relocate all BAS incumbents in markets where it chooses to deploy immediately, as well as any adjacent markets that raise inter-market coordination and interference problems; and during stage two, Nextel will relocate all remaining markets. Throughout this process (including after the initiation of stage two), BAS licensees that have not been relocated would be permitted to continue operation on their existing seven channels until they are relocated to the new band plan at 2025-2110 MHz. 617 According to the parties, this relocation proposal would therefore minimize disruption to incumbent BAS operations as well as serve the public interest by preserving the ability of broadcasters to provide the public with timely coverage of emergencies and other news events. The parties further contend that the thirty-month timeframe for relocating all BAS incumbents under the proposed Nextel-BAS relocation plan "should ensure that the 1990-2025 MHz band is cleared nationwide before MSS entrants are ready to begin service in the 2000-2025 MHz band."618
- 254. We will require Nextel to file progress reports within twelve months and twenty-four months after the effective date of this Report and Order on the status of the transition, including

⁶¹³ MSS Third R&O, 18 FCC Rcd 23638.

⁶¹⁴ See 47 C.F.R. §§ 74.690, 101.73.

⁶¹⁵ Each authorized 2 GHz MSS licensee receives an equal share of the available frequencies in which its primary service operations will take place, to be chosen at the time it has launched one satellite into its intended orbit. Each authorized 2 GHz MSS system may also operate at other frequencies in the 2 GHz MSS band, provided it does not cause harmful interference to other assigned satellite networks or incumbent terrestrial services that have not been relocated. See In The Matter Of The Establishment Of Policies And Service Rules For The Mobile Satellite Service In The 2 GHz Band, IB Docket 99-81, Report and Order, 15 FCC Rcd 16127, 16138-140 ¶ 16-21 (2000).

⁶¹⁶ MSS Third R&O, 18 FCC Rcd at 23654-57 ¶¶ 32-35.

⁶¹⁷ MSTV/NAB/Nextel May 3, 2004 Ex Parte at 3-6.

⁶¹⁸ Id. at 7.

identifying the markets that will be relocated during stage one and all remaining markets that will be relocated during stage two. This filing also should include the other information the parties stated they would provide as part of the joint implementation plan described in the Nextel-BAS relocation plan. Nextel also will be required to certify to the Commission that all BAS facilities have been relocated within thirty months after the effective date of this *Report and Order*. We note that Nextel's obligation to relocate BAS incumbents must not interfere with its obligation to relocate public safety users in the 800 MHz band.

- Nextel, which uses a terrestrial network, has a different interference potential between its 255. service and BAS than that of MSS and BAS. Unlike satellites, whose signals can blanket the whole country simultaneously, a terrestrial network is limited to discrete geographic areas served by multiple base stations. Thus, the terrestrial nature of Nextel's service allows for the gradual relocation of incumbents during a geographically-based build-out period. Consequently, we will allow Nextel to determine its own schedule for relocating incumbent BAS facilities in a TV market as follows: Nextel must relocate incumbent BAS licensees before beginning operation in a particular BAS market, but Nextel may determine the markets it wishes to serve. Thus, whereas we had established a relocation process based on specific markets (1-30, 31-100, and 101-210) for MSS, Nextel's operations will only affect those markets where Nextel chooses to deploy its service. Unlike MSS, which may take up to five years to relocate BAS services in markets 31 and above, Nextel must relocate incumbent BAS operations in every BAS market it wishes to serve—including markets 31 and above—prior to beginning operations, and all BAS markets within the thirty-month timeframe proposed in the Nextel-BAS relocation plan. We conclude that the differences between the terrestrial nature of Nextel's service and the ubiquitous service that will be provided by MSS warrant these distinctions in the relocation procedures.
- 256. Further, the integrated nature of BAS operations also makes isolated, link-by-link relocation infeasible. Therefore, as a practical matter, we note that it may be necessary for Nextel to relocate more BAS facilities than an interference analysis might indicate as technically necessary in order to meet the comparable facility requirement for relocating BAS operations. Nextel has agreed to relocate BAS licensees across multiple TV markets to avoid inter-market coordination and interference problems. We also recognize that Nextel is likely to deploy its service in some locations in a manner that does not correspond to the geography of the BAS market areas, and note that Nextel will be obligated to relocate all incumbent BAS operations in all BAS markets, as proposed in the Nextel-BAS relocation plan, including those markets where Nextel provides partial, minimal, or no service.
- 257. Nextel, MSTV, and NAB argue that if one or more MSS entrant is prepared to launch service before the spectrum is cleared in all markets, a "key principle" of the Nextel plan should continue to apply—namely that Nextel will remain responsible for paying the upfront relocation costs. We disagree to the extent that this principle is intended to prevent MSS licensees from clearing BAS incumbents earlier. Under this *Report and Order*, MSS licensees will retain the option of accelerating the clearing of those markets so that they could begin operations before Nextel has completed nationwide clearing. We recognize that the parties will have to work cooperatively to ensure a smooth transition for BAS incumbents. To facilitate this process, we will require Nextel to file with the Commission and copy

⁶¹⁹ MSTV/NAB/Nextel May 3, 2004 Ex Parte at 3-4. See also ¶ 253 supra.

⁶²⁰ See 47 C.F.R. §§ 74.690(d) and 78.40(d-e). For example, a BAS licensee's operations in an adjacent market may need to be relocated even though Nextel does not initiate operations in that adjacent market.

⁶²¹ MSTV/NAB/Nextel May 3, 2004 Ex Parte at 5.

⁶²² Id. at 7-8.